0114

Clinical and Pathological Features of Young Idiopathic Membranous Nephropathy

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Objective: To investigate the clinical and pathological features of idiopathic membranous nephropathy (IMN) in young patients.
Methods: Clinical data about 20 patients who were diagnosed as IMN in young patients admitted to the Zhejiang Provincial people's Hospital from January 2013 to December 2014 were retrospectively analyzed, comparing to the 55 patients who were diagnosed with IMN as older patients during the same period in hospital. Analysis of the clinical and pathological features.
Results: The morbidity of IMN in young patients is rising (accounted or IMN 26.7%), and have low proportion of hypertension, hyperglycemia and sclerosis glomeruli than IMN in older patients ($P = 0.002$; $P = 0.044$; $P < 0.0001$). There were higher eGFR and LDL level than latter ($P = 0.027$; $P = 0.038$) but with low levels of T3 and T4 ($P = 0.03$; $P = 0.034$). Furthermore, there was less hyaline change of arteriole and arteriolar wall thickening than latter ($P = 0.027$; $P < 0.0001$).
Conclusion: IMN in young patients have low proportion of hypertension, hyperglycemia and sclerosis glomeruli than IMN in older patients, and with higher eGFR and LDL and lower levels of T3 and T4 than the latter. Furthermore, there is less hyaline change in arteriole and arteriolar wall thickening than latter.

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0178

Soluble Urokinase-type Plasminogen Activator Receptor Serum Levels in Adults with Nephrotic Syndrome

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Objective: The serum levels of soluble urokinase type fibrinolytic enzyme activators receptor (suPAR) in adults with nephrotic syndrome were analyzed.
Methods: The serum levels of soluble urokinase type fibrinolytic enzyme activators receptor (suPAR) in 70 nephrotic syndrome patients with membranous nephropathy, diabetic nephropathy group, lupus nephritis, minimal change kidney disease and focal segmental glomerular sclerosis group was detected by enzyme-linked immunosorbent assay. The relationship between the the clinical parameters and suPAR levels were analyzed.
Results: Serum soluble urokinase receptor levels of nephrotic syndrome patients are significantly higher than the normal control group ($P < 0.01$). The serum suPAR levels of FSGS and MN patients were significant higher than MCD patients ($P < 0.05$). Serum suPAR level was positively correlated with age, serum creatinine, blood urea nitrogen ($rs = 0.401$, $p = 0.001$; $rs = 0.286$, $p = 0.016$; $rs = 0.249$, $p = 0.037$; $rs = 0.245$, $p = 0.041$; $rs = 0.247$, $p = 0.039$), and negatively correlated with eGFR ($rs = -0.265$, $p = 0.026$; $rs = -0.237$, $p = 0.048$; $rs = -0.309$, $p = 0.009$).
Conclusion: Serum suPAR level was positively correlated with age, serum creatinine, blood urea nitrogen, and negatively correlated with eGFR. The serum suPAR levels of FSGS and MN patients were significant higher than MCD patients and may be a potential marker to distinguish FSGS and MCD.

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0183

Clinical Trial of Treatment for Idiopathic Membranous Nephropathy with Leflunomide Combined with Cyclophosphamide and Glucocorticoid

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Objective: To study the efficacy and safety of treating idiopathic membranous nephropathy with leflunomide and cyclophosphamide and glucocorticoid, compared with traditional oral cyclophosphamide therapy and leflunomide therapy.
Methods: Seventy-two patients were randomly divided into three groups: Group A (glucocorticoid + cyclophosphamide, $n = 24$), Group B (glucocorticoid + leflunomide, $n = 24$), Group C (glucocorticoid + cyclophosphamide + leflunomide, $n = 24$). We observed the urine protein quantitative and other clinical indexes and safety during follow-up.
Results: After all patients completed 1 year's observation, the complete remission rates in Group A, Group B and Group C were 58.3%, 62.5% and 87.5%, respectively. The urine protein quantitative was significantly decreased compared with Group B and Group C, and their difference was statistically significant ($P < 0.05$). Serum albumin and serum total cholesterol were significantly improved compared to before treatment ($P < 0.05$). There was no significant difference in serum creatinine ($P > 0.05$).
Conclusion: In general, treatment of idiopathic membranous nephropathy with leflunomide and cyclophosphamide and glucocorticoid is better than with oral cyclophosphamide therapy and leflunomide therapy, with good tolerance and no increase in adverse reactions.

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0185

Value of Plasma Growth Differentiation Factor-15 in Primary Nephrotic Syndrome

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Objective: To detect the plasma level of growth differentiation factor-15 (GDF-15) in patients with primary nephrotic syndrome and in healthy people, then to assess its value in primary nephrotic syndrome.
Methods: Choose healthy adult volunteers as the healthy control group (group A, $n = 60$). Choose primary nephrotic syndrome patients as glucocorticoids and tacrolimus treatment group (group B, $n = 60$). Patients in glucocorticoids and tacrolimus treatment group were given prednisone and tacrolimus. The dose of prednisone was 0.1 mg/kg/d. The dose of tacrolimus was 0.1 mg/kg/d, maintaining blood concentrations of 4–10 ng/ml, and gradually reduced after 3 months. Before treatment (0 w), plasma albumin, liver and kidney function, 24-hour urine protein quantitative, plasma concentrations of GDF-15 (ELISA) were tested in group A and group B. Respectively at 4 w, 8 w and 12 w, plasma albumin, liver and kidney function, 24-hour urine protein quantitative, plasma concentrations of GDF-15 (ELISA) were tested in group B.
Results: Plasma level of GDF-15 in patients with primary nephrotic syndrome was significantly higher than in healthy adults ($P < 0.05$). Plasma level of GDF-15 in patients treated with glucocorticoid and tacrolimus treatment was significantly lower than that before treatment ($P < 0.05$; Figure 1). GDF-15 level was positively related with primary nephrotic syndrome ($r = 0.624$, $P < 0.05$).
Conclusion: GDF-15 may be an important pathogenic factor in primary nephrotic syndrome, and may provide new targets for the treatment of nephrotic syndrome.

Group	GDF-15	*F*	p
Group A	597.39±121.63	12.644	<0.05
Group B (before treatment)	1108.78±346.54*		
Group B (after treatment)	845.48±322.42▲		

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